Safety Attribute Inspection (SAI) Data Collection Tool
5.1.8 Extended Range Operations with Two-Engine Airplanes (ETOPS) (AW)

ELEMENT SUMMARY INFORMATION

Purpose of this Element (certificate holder's responsibility):

- To ensure continuous safe and reliable operations in accordance with the certificate holder's Extended Range Operations with Two-Engine Airplanes (ETOPS) authorization.

Objective (FAA oversight):

- To determine if the certificate holder's Extended Range Operations with Two-Engine Airplanes (ETOPS) program meets all applicable requirements of Title 14 of the Code of the Federal Aviation Regulations (14 CFR) and FAA policies.
- To determine if the certificate holder's Extended Range Operations with Two-Engine Airplanes (ETOPS) program incorporates the safety attributes.
- To identify any shortfalls in the certificate holder's Extended Range Operations with Two-Engine Airplanes (ETOPS) program.

Specific Instructions:

- Intentionally left blank

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs):

- SRRs:

  119.33(a)(3)
  119.43(b)
  119.43(b)(1)
  119.43(b)(2)
  119.43(c)
  121.135(a)(1)
  121.135(b)(1)
  121.135(b)(2)
  121.135(b)(3)
  D.086
  D.086(a)
  D.086(b)
  D.086(c)
  D.086(d)

Related CFRs & FAA Policy/Guidance:

- Related CFRs:

  Intentionally left blank

- FAA Policy/Guidance:

  FAA Order 8300.10, Volume 2, Chapter 82
  FAA Order 8300.10, Volume 3, Chapter 43
  Advisory Circular 120-42A

- FAA Policy/Guidance:
  HBAW 00-15A
  ETOPS Policy Letter EPL 20-1

SAI SECTION 1 - PROCEDURES ATTRIBUTE	
Objective: Procedures, instructions, and information contained in the certificate holder's manual are documented methods for accomplishing a process. Policies contained in the certificate holder's manual should establish the certificate holder's compliance posture. Policies may not be stand-alone statements but may be embedded within procedures, instructions, or information regarding a particular regulatory requirement. The questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder's manual has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated questions regarding who, what, when, where, and how. This section contains policy questions, procedural questions, and instructional or informational questions pertaining to various types of certificate holder requirements such as actions, prohibitions, or resources (i.e., personnel, facilities, equipment, technical data, etc.).	
Tasks	
	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the information listed in the Supplemental Information section of this DCT.
2.	Review the duties and responsibilities for management and other personnel identified by the certificate holder who accomplish the Extended Range Operations with Two-Engine Airplanes (ETOPS) program.
3.	Review the certificate holder's manual to ensure that it contains policies, procedures, instructions, and information necessary for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program.

Questions		
	To meet this objective, the inspector must answer the following questions:	
	Does the content of the certificate holder's manual meet the specific regulatory and FAA policy requirements for an Extended Range Operations with Two-Engine Airplanes (ETOPS} program:	
1.1.	Does the certificate holder's manual specify that the certificate holder will use only airplanes listed in Table 1 of Operations Specifications, paragraph D086 for extended range operations? SRRs: D.086	☐ Yes ☐ No, Explain
1.2.	Does the certificate holder's manual contain a separate reliability reporting system for the extended range fleet? SRRs: D.086(a)	☐ Yes ☐ No, Explain
1.3.	Does the certificate holder's manual specify that the certificate holder will continually assess the propulsion and airframe systems reliability within the extended range fleet in accordance with the programs identified in Table 2 of Operations Specifications, paragraph D086? SRRs: D.086(b) *Related Design JTIs:* 1. Check that the Certificate Holder's programs identified in table 2 of Operations Specifications Paragraph D86(b) include the instructions and information necessary to allow personnel concerned to perform the duty and responsibility of continually assessing the propulsion and airframe systems reliability within the ETOPS fleet. *Sources:* 121.135(a)(1); D.086(b) *Interfaces:* 1.3.11(AW); 1.3.15(AW)	☐ Yes ☐ No, Explain

1.4.	Are the items controlled by the programs identified in Table 2 of Operations Specifications, paragraph D086 identified in the certificate holder's manual? SRRs: D.086(c) *Related Design JTIs:* 1. Check that the Certificate Holder's manual contains a general policy that they shall identify the items controlled by the programs listed in Table 2 Operations Specifications Paragraph D86. *Sources:* 121.135(b)(1); D.086(c) *Interfaces:* 1.3.11(AW); 1.3.15(AW) 2. Check that the Certificate Holder's manual includes instructions and information necessary to allow personnel concerned to perform the duty and responsibility to identify in the manual the items controlled by the programs listed in Table 2 Operations Specifications Paragraph D86. *Sources:* 121.135(a)(1); D.086(c) *Interfaces:* 1.3.11(AW); 1.3.15(AW)	☐ Yes ☐ No, Explain
1.5.	Does the certificate holder's manual specify that the airplanes must meet all requirements for configuration, maintenance and procedures (CMP) for extended-range operations as specified in the following: SRRs: D.086(d)	
1.5.1	The manufacturer's document? SRRs: D.086(d) *Related Design JTIs:* 1. Check that the Certificate Holder's inspection program contains instructions covering procedures, standards, responsibilities and authority of inspection personnel that ensures that the airplane meets all requirements for configuration, maintenance, and procedures (CMP) for ETOPS operations; as specified in the manufacture's document or applicable FAA approved configuration, maintenance, and procedures document; and the current and subsequent FAA approved amendments identified in table 3 of Operations Specifications Paragraph D86. *Sources:* 121.135(b)(19); 121.367; D.086(d) *Interfaces:* 1.3.2(AW)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.5.2	The applicable FAA approved configuration, maintenance, and procedures document? SRRs: D.086(d) *Related Design JTIs:* 1. Check that the Certificate Holder's inspection program contains instructions covering procedures, standards, responsibilities and authority of inspection personnel that ensures that the airplane meets all requirements for configuration, maintenance, and procedures (CMP) for ETOPS operations; as specified in the manufacture's document or applicable FAA approved configuration, maintenance, and procedures document; and the current and subsequent FAA approved amendments identified in table 3 of Operations Specifications Paragraph D86. *Sources:* 121.135(b)(19); 121.367; D.086(d) *Interfaces:* 1.3.2(AW)	☐ Yes ☐ No, Explain ☐ Not Applicable

1.5.3	The current and subsequent FAA approved amendments identified in Table 3 of Operations Specifications, paragraph D086? SRRs: D.086(d) *Related Design JTIs:* 1. Check that the Certificate Holder's inspection program contains instructions covering procedures, standards, responsibilities and authority of inspection personnel that ensures that the airplane meets all requirements for configuration, maintenance, and procedures (CMP) for ETOPS operations; as specified in the manufacture's document or applicable FAA approved configuration, maintenance, and procedures document; and the current and subsequent FAA approved amendments identified in table 3 of Operations Specifications Paragraph D86. *Sources:* 121.135(b)(19); 121.367; D.086(d) *Interfaces:* 1.3.2(AW)	☐ Yes ☐ No, Explain
1.6.	Does the certificate holder's ETOPS program comply with the guidance contained in FAA Order 8300.10, Volume 2, Chapter 82? *Related Design JTIs:* 1. Check that the Certificate Holder's Verification program includes a list of primary systems, by Air Transportation Association chapter. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(1) 2. Check that the Certificate Holder's Verification program includes procedures for initiating verification actions. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(1) 3. Check that the Certificate Holder's ETOPS supplemental maintenance program includes written procedures to ensure the flight crew is fully briefed prior to dispatch concerning the event and/or the maintenance performed when regularly scheduled ETOPS revenue flight is used as a maintenance verification flight. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(b) *Interfaces:* 3.1.3(OP); 3.1.9(OP); 3.2.1(OP) 4. Check that the Certificate Holder's Verification program includes conditions that require verification flights. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(1) *Interfaces:* 3.2.1(OP); 7.1.6(AW) 5. Check that the Certificate Holder's ETOPS supplemental maintenance program contains verification flight procedures for events involving propulsion system shutdown and for certain adverse trends or prescribed events. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(b) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW) 6. Check that the Certificate Holder's ETOPS supplemental maintenance program contains verification flight procedures for events involving engine change and for certain adverse trends or prescribed events. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(b) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW) 7. Check that the Certificate Holder's ETOPS supplemental maintenance program contains verification flight procedures for events involving major engine module change and for certain adverse trends or	☐ Yes ☐ No, Explain

		prescribed events. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(b) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW)	
	8.	Check that the Certificate Holder's ETOPS supplemental maintenance program contains verification flight procedures for events involving primary system failure and for certain adverse trends or prescribed events. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(b) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW)	
	9.	Check that the Certificate Holder's Verification program includes procedures that monitor and evaluate corrective actions. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(1) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	10.	Check that the Certificate Holder's Verification program includes procedures that identify and reverse the adverse trends. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(1) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	11.	Check that the Certificate Holder's Verification program includes procedures that verify the implementation of corrective action. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(1) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	12.	Check that the Certificate Holder's instructions and information regarding the APU in-flight start validation program, as part of their overall ETOPS maintenance program for each specific airframe/engine combination, the in-flight APU starts need not be performed on ETOPS flights (the APU must be in the ETOPS configuration in accordance with the Applicable configuration and maintenance procedures (CMP) document), in order for credit to be allowed. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(e) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW)	
	13.	Check that the Certificate Holder's instructions and information regarding the APU in-flight start validation program, as part of their overall ETOPS maintenance program for each specific airframe/engine combination, if in-flight APU starts are performed on an ETOPS flight, the start should be attempted on the return leg to the United States. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(e) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW)	
	14.	Check that the Certificate Holder's instructions and information regarding the APU in-flight start validation program, as part of their overall ETOPS maintenance program for each specific airframe/engine combination, the start attempt should be initiated before top of descent, or at such time, that will ensure a two-hour cold soak at altitude. *Sources:* 8300.10, Volume 2, Chapter 82, Section 1 Paragraph 5B(2)(e) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW)	

	15.	Check that the Certificate Holder's instructions and information regarding the APU in-flight start validation program, as part of their overall ETOPS maintenance program for each specific airframe/engine combination, if the APU fails to start on the first attempt, subsequent start attempts may be made within the limits of the airframe and APU manufacturer design specifications. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(e) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW)	
	16.	Check that the Certificate Holder's instructions and information regarding the APU in-flight start validation program, as part of their overall ETOPS maintenance program for each specific airframe/engine combination, that a continuation of the initial in-flight start validation program for each specific airframe / engine combination may be required, if less than 95 percent of in-flight start reliability is achieved. *Sources:* 8300.10 Volume 2 Chapter 82 Section 1 Paragraph 5B(2)(e) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	17.	Check that the Certificate Holder's instructions and information regarding the Reliability program includes the reporting criteria. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(3) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	18.	Check that the Certificate Holder's includes the Reliability program procedures to report significant individual events (engine shutdowns, flight diversions, etc.). *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(3) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	19.	Check that the Certificate Holder's Engine oil consumption monitoring program includes the established limits of consumption. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 5B(4) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	20.	Check that the Certificate Holder's Engine oil consumption monitoring program includes the procedures for use and verification prior to the start of each ETOPS leg. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 5B(4) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	21.	Check that the Certificate Holder's APU oil consumption monitoring program includes the established limits of consumption. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 5B(4) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	22.	Check that the Certificate Holder's APU oil consumption monitoring program includes the procedures for use and verification prior to the start of each ETOPS leg. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 5B(4) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	23.	Check that the Certificate Holder's ETOPS parts control includes the methods of verification of proper parts. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(5) Change 12	

	Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.10(AW); 1.3.21(AW); 1.3.22(AW) 24. Check that the Certificate Holder's ETOPS parts control includes control procedures during parts pooling and borrowing. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(5) Change 12 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.10(AW); 1.3.21(AW); 1.3.22(AW) 25. Check that the Certificate Holder's Continuing Analysis and Surveillance program for ETOPS, includes the frequency of audits. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(7) Change 12 *Interfaces:* 1.3.11(AW); 1.3.15(AW) 26. Check that the Certificate Holder's Continuing Analysis and Surveillance program for ETOPS, includes the reports generated by audits. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(7) Change 12 *Interfaces:* 1.3.11(AW); 1.3.15(AW) 27. Check that the Certificate Holder's instructions and information regarding their Continuing Analysis and Surveillance program for ETOPS, includes the ease of use of the program. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(7) Change 12 *Interfaces:* 1.3.11(AW); 1.3.15(AW) 28. Check that the Certificate Holder's APU in-flight-start program, monitors the APU at a level of performance and reliability established by the manufacturer or FAA. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(8) Change 12 *Interfaces:* 1.3.11(AW); 1.3.15(AW) 29. Check that the Certificate Holder's APU in-flight-start program, includes a periodic sampling of APU in-flight starting. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(8) Change 12 *Interfaces:* 1.3.11(AW); 1.3.15(AW) 30. Check that the Certificate Holder's APU in-flight-start program sampling interval may be adjusted according to system performance. *Sources:* 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(8) Change 12 *Interfaces:* 1.3.11(AW); 1.3.15(AW)	
1.7.	Does the certificate holder's ETOPS program comply with the guidance contained in Advisory Circular 120-42A? *Related Design JTIs:* 1. Check that the Certificate Holder's instructions and information regarding CMP standards in effect prior to the most current revision will no longer be considered suitable for continued ETOPS operation. *Sources:* Advisory Circular 120-42a Paragraph 7f(4) Dated:12/30/88 *Interfaces:* 1.1.1(AW); 1.1.2(AW); 1.1.2(OP); 1.3.1(AW); 1.3.2(AW) 2. Check that the Certificate Holder's instructions and information	☐ Yes ☐ No, Explain

		regarding CMP standards in effect prior to the most current revision will no longer be considered suitable for continued ETOPS operation. *Sources:* Advisory Circular 120-42a Paragraph 7(f)(4) Dated:12/30/88 *Interfaces:* 1.3.11(AW); 1.3.15(AW)	
	3.	Check that the Certificate Holder's instructions and information regarding the incorporation of additional modifications do not adversely effect reliability or conflict with requirements for ETOPS approval. *Sources:* Advisory Circular 120-42a Paragraph 8(h) Dated:12/30/88 *Interfaces:* 1.3.11(AW); 1.3.15(AW)	
	4.	Check that the Certificate Holder's instructions and information regarding the incorporation of additional maintenance actions do not adversely effect reliability or conflict with requirements for ETOPS approval. *Sources:* Advisory Circular 120-42a Paragraph 8(h) Dated:12/30/88 *Interfaces:* 1.3.11(AW); 1.3.15(AW)	
	5.	Check that the Certificate Holder's instructions and information regarding the ETOPS maintenance program for airplanes used in 75-, 120-, and 180-minute ETOPS operations contains the standards, guidance, and direction necessary to support the intended operations. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1 Dated:12/30/88 *Interfaces:* 1.3.1(AW); 1.3.2(AW)	
	6.	Check that the Certificate Holder's instructions and information regarding the maintenance personnel involved in affecting this program are made aware of the special nature of ETOPS and have the knowledge, skills and ability to accomplish the requirements of the program. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1 Dated:12/30/88 *Interfaces:* 4.2.1(AW)	
	7.	Check that the Certificate Holder's ETOPS maintenance procedures preclude the identical action from being applied to multiple similar elements in any ETOP critical system (e.g., fuel control change on both engines). *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(2) Dated:12/30/88 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 7.1.6(AW)	
	8.	Check that the Certificate Holder's Engine oil consumption program reflect the manufacturer's recommendations. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(4) Dated:12/30/88 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	9.	If the APU is required for ETOPS, check that the Certificate Holder's APU oil consumption program reflect the manufacturer's recommendations. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(4) Dated:12/30/88 *Interfaces:* 1.3.1(AW); 1.3.2(AW); 1.3.11(AW); 1.3.15(AW)	
	10.	Check that the Certificate Holder's ETOPS reliability program is event-orientated and incorporates reporting procedures for significant events detrimental to ETOPS flights.	

	Sources: Advisory Circular 120-42a Appendix 4 Paragraph 1a(7) Dated:12/30/88 *Interfaces:* 1.3.11(AW); 1.3.15(AW) 11. Check that the Certificate Holder's ETOPS Maintenance Training Program focuses on the special nature of ETOPS. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(9) Dated:12/30/88 *Interfaces:* 4.2.1(AW) 12. Check that the Certificate Holder's ETOPS Maintenance Training Program is included in the normal maintenance training program and emphasizes the special nature of ETOPS maintenance requirements. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(9) Dated:12/30/88 *Interfaces:* 4.2.1(AW) 13. Check that the Certificate Holder's ETOPS Maintenance Training Program provides the necessary training to personnel involved in ETOPS so that the ETOPS programs are properly accomplished and emphasize the special nature of ETOPS maintenance requirements. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(9) Dated:12/30/88 *Interfaces:* 4.2.1(AW) 14. Check that the Certificate Holder's parts control program includes verification that parts placed on ETOPS airplanes during parts borrowing maintain the necessary ETOPS configuration for that airplane. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(10) Dated:12/30/88 *Interfaces:* 1.3.7(AW); 1.3.10(AW); 1.3.21(AW); 1.3.22(AW) 15. Check that the Certificate Holder's parts control program includes verification that parts placed on ETOPS airplanes during parts pooling arrangements maintain the necessary ETOPS configuration for that airplane. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(10) Dated:12/30/88 *Interfaces:* 1.3.7(AW); 1.3.10(AW); 1.3.21(AW); 1.3.22(AW) 16. Check that the Certificate Holder's parts control program includes verification that parts placed on ETOPS airplanes after repair maintain the necessary ETOPS configuration for that airplane. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(10) Dated:12/30/88 *Interfaces:* 1.3.7(AW); 1.3.10(AW); 1.3.21(AW); 1.3.22(AW) 17. Check that the Certificate Holder's parts control program includes verification that parts placed on ETOPS airplanes after overhaul, maintain the necessary ETOPS configuration for that airplane. *Sources:* Advisory Circular 120-42a Appendix 4 Paragraph 1a(10) Dated:12/30/88 *Interfaces:* 1.3.7(AW); 1.3.10(AW); 1.3.21(AW); 1.3.22(AW)	
1.8.	Does the certificate holder's manual contain the required references to or excerpts from Operations Specifications, paragraph D086? SRRs: 119.43(b)	☐ Yes ☐ No, Explain

1.9.	If the certificate holder's manual includes excerpts from its operations specifications, are the excerpts clearly identified as part of the operations specifications? SRRs: 119.43(b)(1)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.10.	Does the certificate holder's manual require compliance with Operations Specifications, paragraph D086? SRRs: 119.43(b)(2)	☐ Yes ☐ No, Explain
1.11.	Does the certificate holder's manual contain a method for keeping all persons engaged in its operations informed of the provisions of Operations Specifications, paragraph D086? SRRs: 119.43(c)	☐ Yes ☐ No, Explain
2.	Does the certificate holder's manual contain general policies for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program that comply with the SRRs? SRRs: 119.33(a)(3); 121.135(b)(1); D.086	☐ Yes ☐ No, Explain
3.	Does the certificate holder's manual reference the appropriate Federal Aviation Regulations listed in the Supplemental Information section of this safety attribute inspection (SAI)? SRRs: 121.135(b)(3)	☐ Yes ☐ No, Explain
4.	Does the certificate holder's manual contain the duties and responsibilities for personnel who will accomplish the Extended Range Operations with Two-Engine Airplanes (ETOPS) program? SRRs: 121.135(b)(2)	☐ Yes ☐ No, Explain
5.	Does the certificate holder's manual include instructions and information for personnel concerned to meet the requirements of the Extended Range Operations With Two Engine Airplanes program? SRRs: 121.135(a)(1)	☐ Yes ☐ No, Explain

SAI SECTION 1 - PROCEDURES ATTRIBUTE Drop-Down Menu	
1.	No procedures, policy, instructions or information specified.
2.	Procedures or instructions and information do not identify (who, what, when, where, how).
3.	Procedures, policy or instructions and information do not comply with CFR.
4.	Procedures, policy or instructions and information do not comply with FAA policy and guidance.
5.	Procedures, policy or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen's Charts, etc.).
6.	Procedures, policy or instructions and information unclear or incomplete.
7.	Documentation quality (e.g., unreadable or illegible).
8.	Procedures, policy or instructions and information inconsistent across Certificate Holder manuals (FOM - Flight Operations Manual to GMM - General Maintenance Manual, etc.).
9.	Procedures, policy or instructions and information inconsistent across media (e.g., paper, microfiche, electronic).
10.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
11.	Other.

SAI SECTION 2 - CONTROLS ATTRIBUTE
Objective: Controls are checks and restraints designed into a process to ensure a desired result. The questions in this section of the DCT are designed to assist the inspector in determining if checks and restraints are designed into the process to ensure the desired result is achieved. Controls should be written into the manual system to ensure that the most important manual policies, procedures or instructions, and information will be followed. Controls may be in the form of administrative controls, which are secondary or supplemental written procedures. Like written procedures, administrative controls also need to provide answers to questions regarding who, what, when, where, and how. Controls may also be in the form of engineered controls, such as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.).
Tasks
To meet this objective, the inspector must accomplish the following tasks:
1. Review the control questions below.
2. Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the controls that it has documented.

Questions		
	To meet this objective, the inspector must answer the following questions:	
1.	Are the following controls built into the Extended Range Operations with Two-Engine Airplanes (ETOPS) program:	
1.1.	Is there a control or controls in place to ensure the certificate holder complies with conditions and limitations of their approved Operations Specifications, paragraph D086?	☐ Yes ☐ No, Explain
1.2.	Is there a control or controls in place to ensure that ETOPS maintenance personnel are trained and qualified?	☐ Yes ☐ No, Explain
1.3.	Is there a control or controls in place to ensure that maintenance is accomplished in accordance with the standards of the ETOPS maintenance program?	☐ Yes ☐ No, Explain
1.4.	Is there a control or controls in place to ensure that the certificate holder notifies the Certificate Holding District Office (CHDO) of any system failures or abnormalities?	☐ Yes ☐ No, Explain
1.5.	Is there a control or controls in place to ensure that audits are performed on the ETOPS program?	☐ Yes ☐ No, Explain
1.6.	Is there a control or controls in place to ensure that the certificate holder's ETOPS aircraft are configured and maintained in accordance with the manufacturer's type design and configuration standards for operating in an ETOPS environment?	☐ Yes ☐ No, Explain
2.	Does the certificate holder have a documented method for assessing the impact of any changes made to the controls in the Extended Range Operations with Two-Engine Airplanes (ETOPS) program?	☐ Yes ☐ No, Explain

SAI SECTION 2 - CONTROLS ATTRIBUTE Drop-Down Menu	
1.	No controls specified.
2.	Documentation for the controls do not identify (who, what, when, where, how).
3.	Controls incomplete.
4.	Controls could be circumvented.
5.	Controls could be unenforceable.
6.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
7.	Other.

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE
Objective: Process measurements are used by the certificate holder to measure and to assess its processes, to identify and to correct problems or potential problems, and to make improvements to the processes. The questions in this section of the DCT are designed to assist the inspector in determining if the certificate holder measures or assesses information to identify, analyze, and document potential problems with the process. Process measurements are a certificate holder's internal evaluation or auditing of the most important policies, procedures or instructions, and information associated with an element. To prevent the duplication of work, process measurements are most commonly addressed through a combination of auditing features contained in both the certificate holder's safety program/internal evaluation program (for operations and cabin safety related issues) and the auditing function of the Continuous Analysis and Surveillance System (for airworthiness or maintenance/inspection related issues). The director of safety and the quality assurance department often work together to accomplish this function for the certificate holder. This approach requires amendment of the safety program/internal evaluation program audit forms or checklists and the Continuous Analysis and Surveillance System audit forms or checklists to include the specific process measurements for each element.

Tasks	
	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the process measurement questions below.
2.	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the process measurements that it has documented.

Questions		
	To meet this objective, the inspector must answer the following questions:	
1.	Does the certificate holder's Extended Range Operations with Two-Engine Airplanes (ETOPS) program include the following process measurements:	
1.1.	Is there a process measurement or process measurements that would reveal if the certificate holder failed to comply with conditions and limitations of its approved Operations Specifications, paragraph D086?	☐ Yes ☐ No, Explain
1.2.	Is there a process measurement or process measurements that would reveal if assigned ETOPS maintenance personnel are not properly trained and qualified?	☐ Yes ☐ No, Explain
1.3.	Is there a process measurement or process measurements that would reveal if maintenance is not accomplished in accordance with the standards of the ETOPS maintenance program?	☐ Yes ☐ No, Explain
1.4.	Is there a process measurement or process measurements that would reveal if the certificate holder failed to notify the Certificate Holding District Office (CHDO) of any system failures or abnormalities?	☐ Yes ☐ No, Explain
1.5.	Is there a process measurement or process measurements that would reveal if audits were not performed on the ETOPS program?	☐ Yes ☐ No, Explain
1.6.	Is there a process measurement or process measurements that would reveal if ETOPS aircraft are not configured and maintained in accordance with the manufacturer's type design and configuration standards?	☐ Yes ☐ No, Explain
2.	Is there a process measurement or process measurements that would reveal if the certificate holder s policy, procedures, instructions, and information contained in its manual were not followed?	☐ Yes ☐ No, Explain

3.	Does the certificate holder document its process measurement results?	☐ Yes ☐ No, Explain
4.	Does the certificate holder s manual provide for the use of process measurement results to improve its programs?	☐ Yes ☐ No, Explain
5.	Does the organization that conducts the process measurements have direct access to the person with responsibility for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program?	☐ Yes ☐ No, Explain

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE Drop-Down Menu
1. No process measurements specified.
2. Documentation for the process measurements does not identify (who, what, when, where, how).
3. Inability to identify negative findings.
4. No provisions for implementing corrective actions.
5. Ineffective follow-up to determine effectiveness of corrective actions.
6. Resources requirements (personnel, facilities, equipment, technical data).
7. Other.

SAI SECTION 4 - INTERFACES ATTRIBUTE
Objective: Interfaces are used by the certificate holder to identify and to manage the interactions between processes. The questions in this section of the DCT are designed to assist the inspector in determining whether or not interactions between the policies, procedures or instructions, and information associated with other independent processes within the certificate holder's organization are documented. Written policies, procedures or instructions, and information that are interrelated and located in different manuals within the certificate holder's manual system must be consistent and complement each other. For the interfaces to be effectively managed, it is not only important to identify what the interfaces are, but it is imperative to document the specific location of the interfaces within the certificate holder's manual system.

Tasks	
	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the interfaces associated with the Extended Range Operations with Two-Engine Airplanes (ETOPS) program that have been identified along with the individual questions in section 1, Procedures, of this DCT.
2.	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the interfaces that it has documented.

Questions		
	To meet this objective, the inspector must answer the following questions: Note: The design job task items (JTIs) displayed with the questions in section 1, Procedures, of this DCT identify potential interfaces (by element number) for this element.	
1.	Does the certificate holder's manual properly address the interfaces that are identified along with the individual questions in section 1, Procedures, of this DCT?	☐ Yes ☐ No, Explain
2.	Does the certificate holder's manual document a method for assessing the impact of any changes to the associated interfaces within the ETOPS program?	☐ Yes ☐ No, Explain

SAI SECTION 4 - INTERFACES ATTRIBUTE Drop-Down Menu
1. No interfaces specified.
2. The following interfaces not identified within the Certificate Holder's manual system:
3. Interfaces listed are inaccurate.
4. Specific location of interfaces not identified within the manual system.
5. Other

SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTES	
Objective: The questions in this section of the DCT address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)	
Tasks	
	To meet this objective, the inspector must accomplish the following tasks:
1.	Identify the person who has overall responsibility for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program.
2.	Identify the person who has overall authority for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program.
3.	Review the duties and responsibilities of the person(s), documented in the certificate holder's manual.
4.	Review the appropriate organizational chart.

Questions		
	To meet this objective, the inspector must answer the following questions:	
1.	Does the certificate holder's manual clearly identify who is responsible for the quality of the Extended Range Operations with Two-Engine Airplanes (ETOPS) program?	☐ Yes ☐ No, Explain Name/Title:
2.	Does the certificate holder's manual clearly identify who has authority to establish and modify the policies, procedures, instructions, and information for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program?	☐ Yes ☐ No, Explain Name/Title:
3.	Does the certificate holder's manual include the duties and responsibilities of those who manage the work required by the Extended Range Operations with Two-Engine Airplanes (ETOPS) program? SRRs: 121.135(b)(2)	☐ Yes ☐ No, Explain
4.	Does the certificate holder's manual include instructions and information for those who manage the work required by the Extended Range Operations with Two-Engine Airplanes (ETOPS) program? SRRs: 121.135(a)(1)	☐ Yes ☐ No, Explain
5.	Does the certificate holder's manual clearly and completely document the responsibility for this position?	☐ Yes ☐ No, Explain
6.	Does the certificate holder's manual clearly and completely document the authority for this position?	☐ Yes ☐ No, Explain
7.	Does the certificate holder's manual clearly and completely document their qualification standards for the person having responsibility for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program?	☐ Yes ☐ No, Explain
8.	Does the certificate holder's manual clearly and completely document their qualification standards for the person having authority to establish and modify the certificate holder's policies, procedures, instructions, and information for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program?	☐ Yes ☐ No, Explain

9.	Does the certificate holder's manual clearly and completely document the procedures for delegation of authority for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program?	☐ Yes ☐ No, Explain

SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTES Drop-Down Menu
1. Not documented.
2. Documentation unclear.
3. Documentation incomplete.
4. Other.